

On your answer sheet, write in or circle the correct letter for each question.

9Ea

- 1 Compared to non-metals, metals are:
A good conductors of heat but not electricity.
B good conductors of electricity but not heat.
C good conductors of both heat and electricity.
D not good conductors.
- 2 Which list contains only magnetic materials?
A magnesium, copper, gold
B aluminium, gold, iron
C iron, nickel, cobalt
D nickel, tin, lead
- 3 Which of these describes some properties of most metals?
A They ring when hit, are shiny and most are solids.
B They are all liquids, have high melting points and conduct electricity.
C They cannot be shaped or pulled into long thin wires.
D They are all brittle and break when you try to bend them or hit them.
- 4 Which of the following statements is true?
A Iron is used to make planes because it is very strong and light.
B Aluminium is used to make jewellery because it is light, strong and shiny.
C Gold is used to make buildings because it is very cheap and gold is a very common metal.
D Copper is used to make electrical wires because it conducts electricity well and can be stretched.

9Eb

- 1 When some acid is put onto a piece of metal:
A there is always a reaction which burns a hole in the metal.
B there is never a reaction.
C some metals will react with the acid and produce bubbles of gas.
D there is always a reaction, which produces a powder.
- 2 Which of the following is the correct way to test for hydrogen gas?
A Bubble the gas through limewater.
B Bubble the gas through universal indicator solution.
C Put a glowing splint into a tube of the gas (the splint will burn brightly).
D Put a burning splint into a tube of the gas (the gas will explode with a squeaky pop).
- 3 If an acid reacts with a metal, the products are:
A a salt and water.
B a salt and hydrogen gas.
C only hydrogen gas.
D a salt, water and carbon dioxide.
- 4 Which of the following is **not** needed to make a prediction about the products of a reaction between a metal and an acid?
A general information about the reactions between metals and acids
B information about the properties of the metal
C the name of the metal used
D the name of the acid used

9Ec

- 1 When some acid is put onto a piece of rock:
- A it always reacts and gives off a gas.
 - B it reacts if the rock contains a carbonate.
 - C it always reacts explosively and shatters the rock.
 - D it won't react.
- 2 The best test for carbon dioxide uses:
- A universal indicator solution.
 - B a burning splint.
 - C litmus paper.
 - D limewater.
- 3 When an acid reacts with a metal carbonate, the products are:
- A the metal and carbon dioxide.
 - B a salt and water.
 - C carbon dioxide, water and a salt.
 - D the metal, a salt and water.
- 4 Which of these is **not** a sign that a reaction has taken place?
- A The substance catches fire.
 - B The substance has changed from a solid to a liquid.
 - C A gas is given off.
 - D There is an explosion.

9Ed

- 1 A neutral solution is made when:
- A two acids are added together.
 - B an acid and an alkali are added together.
 - C water is added to an acid.
 - D water is added to an alkali.
- 2 When an acid and an alkali react together:
- A a salt and water are both produced.
 - B only a salt is produced.
 - C a metal is formed.
 - D a gas is given off.

- 3 Which of these word equations is correct?
- A copper oxide + hydrochloric acid → copper sulphate + water
 - B copper oxide + hydrochloric acid → copper chloride + carbon dioxide + water
 - C copper oxide + hydrochloric acid → copper chloride + hydrogen
 - D copper oxide + hydrochloric acid → copper chloride + water
- 4 Which of these is **not** a salt?
- A magnesium sulphate
 - B iron sulphide
 - C tin chloride
 - D zinc nitrate